In the Abstract

Please replace the Abstract at page 23, lines 2-11, with the following amended Abstract.

Carbon nanotube growth from a catalyst particle is achieved in a high-yield process using the catalyst particle on a free end of a cantilever, and contacting, at an elevated temperature, a carbon-containing gas to the particle. According to an example embodiment of the present invention, a carbon nanotube device includes a catalyst island, such as Fe₂O₃, and a carbon nanotube extending therefrom. In one implementation, the catalyst island is disposed on a top surface of a substrate. The carbon nanotube device is useful in a variety of implementations and applications, such as in an atomic force microscope (AFM), in resonators (e.g., where a free end of the carbon nanotube is adapted to vibrate) and in electronic circuits (e.g., where the carbon nanotube is electrically coupled between two nodes, such as between the catalyst island and a circuit node). In addition, growing carbon nanotubes with such a catalyst island is particularly useful in the high-yield growth of a large number of nanotubes.